

PATENT APPLICATION
DOCKET NO.: 200315309-1

LISTING OF THE CLAIMS

Pursuant to 37 C.F.R. §1.121, provided below is a listing of the pending claims.

1. (Currently Amended) A printed circuit board (PCB) substrate, comprising:

a first dielectric material associated with a first current return layer;

a second dielectric material associated with a second current return layer;

a signal path layer interposed between said first dielectric material and said second dielectric material; and

an adhesive layer interposed between said first dielectric material and said second dielectric material, said adhesive layer being substantially coplanar relative to said signal path layer, wherein said adhesive layer has a lower loss tangent than at least one of said first and second dielectric materials.

PATENT APPLICATION
DOCKET NO.: 200315309-1

2. (Original) The PCB substrate as recited in claim 1, wherein said adhesive layer is comprised of a material operable to substantially reduce attenuation due to an electrical coupling effect between a pair of signal traces disposed in said signal path layer.

3. (Canceled)

4. (Currently Amended) The PCB substrate as recited in claim [[2]] 1, wherein said adhesive layer has a higher glass transition point (T_g) than said first dielectric material.

Claims 5-7. (Canceled)

PATENT APPLICATION
DOCKET NO.: 200315309-1

8. (Currently Amended) The PCB substrate as recited in claim [[2]] 1, wherein said first dielectric material comprises a material selected from the group consisting of FR-4 material, pre-preg material, core material, and B-stage substrate material.

Claims 9-15. (Canceled)

PATENT APPLICATION
DOCKET NO.: 200315309-1

16. (Currently Amended) A method for constructing a printed circuit board (PCB) substrate, comprising:

providing a first dielectric material associated with a first current return layer;

providing a second dielectric material associated with a second current return layer;

providing a signal path layer interposed between said first dielectric material and said second dielectric material;

selecting an adhesive layer having a lower loss tangent than at least one of said first and second dielectric materials; and

providing ~~[[an]]~~ said adhesive layer interposed between said first dielectric material and said second dielectric material, said adhesive layer being substantially coplanar relative to said signal path layer.

PATENT APPLICATION
DOCKET NO.: 200315309-1

17. (Original) The method as recited in claim 16, further comprising selecting said adhesive layer to include a material operating to substantially reduce attenuation due selecting an adhesive layer to include a material operating to substantially reduce attenuation due to an electrical coupling effect between a pair of signal traces disposed in said signal path layer.

18. (Canceled)

19. (Currently Amended) The method as recited in claim [[17]] 16, further comprising selecting said adhesive layer to include a material having a higher glass transition point (T_g) than said first dielectric material.

PATENT APPLICATION
DOCKET NO.: 200315309-1

20. (Currently Amended) The method as recited in claim [[17]] 16, further comprising curing a layer of said PCB substrate, said layer selected from the group consisting of said first dielectric material, said second dielectric material, and said adhesive layer.

Claims 21-25. (Canceled)

26. (New) The method as recited in claim 16, wherein said adhesive layer selected comprises a two-sided adhesive tape.

27. (New) The method as recited in claim 16, wherein said adhesive layer selected comprises an adhesive film having a copper foil.

PATENT APPLICATION
DOCKET NO.: 200315309-1

28. (New) The method as recited in claim 16, wherein said adhesive layer selected comprises an epoxy adhesive sheet containing a glass-based adhesive that provides a low loss tangent, thin form factor and a glass transition temperature higher than said first dielectric material.

29. (New) The method as recited in claim 16, wherein said adhesive layer selected comprises an expanded polytetrafluoroethylene (ePTFE).

30. (New) The method as recited in claim 16, wherein said adhesive layer selected has a loss tangent of about 0.0036 or less.

31. (New) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises a two-sided adhesive tape.

PATENT APPLICATION
DOCKET NO.: 200315309-1

32. (New) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an adhesive film having a copper foil.

33. (New) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an epoxy adhesive sheet containing a glass-based adhesive that provides a low loss tangent, thin form factor and a glass transition temperature higher than said first dielectric material.

34. (New) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an expanded polytetrafluoroethylene (ePTFE).

35. (New) The PCB substrate as recited in claim 1, wherein said adhesive layer has a loss tangent of about 0.0036 or less.